IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

NATIONAL STEEL CAR LIMITED,)
Plaintiff,)
v.) C.A. No. 24-594-JLH
FREIGHTCAR AMERICA, INC., FREIGHTCAR NORTH AMERICA, LLC, JAC OPERATIONS INC., and FCA- FASEMEX, LLC,))) JURY TRIAL DEMANDED))
Defendants.)

SECOND AMENDED COMPLAINT FOR PATENT INFRINGEMENT

1. Plaintiff National Steel Car Limited ("NSC"), for its Complaint against
Defendants FreightCar America, Inc. ("FreightCar"), FreightCar North America, LLC
("FreightCar North America"), JAC Operations Inc. ("JAC Operations"), FCA-FASEMEX, LLC
("FCA-FASEMEX" and collectively, "Defendants" or the "FreightCar Entities"), alleges as
follows:

THE PARTIES

- 2. Plaintiff National Steel Car Limited is a Canadian corporation having an address at 600 Kenilworth Avenue North, P.O. Box 2450, Hamilton, Ontario, L8N 3J4.
- 3. On information and belief, Defendant FreightCar America, Inc. is a Delaware Corporation having an address at 125 South Wacker Drive, Chicago, IL 60606.
- 4. On information and belief, Defendant FreightCar North America, LLC is a Delaware limited liability company having an address at 125 South Wacker Drive, Chicago, IL 60606.

- 5. On information and belief, Defendant JAC Operations Inc. is a Delaware limited liability company having an address at 125 South Wacker Drive, Chicago, IL 60606.
- 6. On information and belief, Defendant FCA-FASEMEX, LLC is a Delaware limited liability company having an address at 125 South Wacker Drive, Chicago, IL 60606.
- 7. On information and belief, Defendants FreightCar North America, JAC Operations, and FCA-FASEMEX are wholly owned by Defendant FreightCar.
- 8. On information and belief, Defendant FCA-FASEMEX is a subsidiary of FreightCar North America.
- 9. On information and belief, FreightCar North America is a holding company that is wholly owned by FreightCar.
- 10. On information and belief, JAC Operations is a holding company that is wholly owned by FreightCar.
- 11. On information and belief, Defendant FCA-FASEMEX was originally created as part of a joint venture between FreightCar North America and a third-party as part of plans to expand FreightCar's manufacturing business in Mexico.
 - 12. On information and belief, FreightCar now wholly owns FCA-FASEMEX.

JURISDICTION AND VENUE

- 13. This action arises under the Patent Laws of the United States, 35 U.S.C. § 1, et. seq.
- 14. This Court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

- 15. This Court also has jurisdiction over this action pursuant to 28 U.S.C. § 1332 because Plaintiff is a Canadian company, each of the FreightCar Entities are Delaware entities, and the amount in controversy exceeds \$75,000, exclusive of interest and costs.
- 16. This Court has personal jurisdiction over the FreightCar Entities because they are Delaware entities.
- 17. Venue is proper in this Court under 28 U.S.C. §§ 1391 and 1400(b) because the FreightCar Entities are Delaware entities.

NATIONAL STEEL CAR LIMITED

- 18. NSC has earned a reputation as North America's leading railroad freight car manufacturer.
- 19. NSC was founded in June 1912 and the first wood and steel freight cars left the production line that year.
- 20. Example rail cars are shown below in an open-top hopper with bottom discharge configuration. Material, such as iron ore, can be deposited into the top of the car. The deposited material sits on a mechanically-driven floor that opens in order to gravity-feed the material into a ship loader or other conveyance system positioned below the rail car.
- 21. NSC designed, built and sold hundreds of such open-top hopper with bottom discharge rail cars (colloquially referred to as "jennies") to Canadian National Railway Company ("CN") for use on its Duluth, Missabe and Iron Range Railway ("DMIR") subsidiary in or around 2009.
- 22. Unique requirements of docks on which the jennies would be used by DMIR in Two Harbors, Minnesota led NSC to innovate a number of novel features for the rail cars designed and provided in or around 2009.

23. An image of one of the jennies as manufactured by NSC and used by DMIR (the "NSC Jennies") is shown below:





24. NSC filed for U.S. Patent No. 8,166,892 (the "'892 Patent," attached hereto as Exhibit A) and 8,132,515 (the "'515 Patent," attached hereto as Exhibit B) to cover innovations it made in the design and construction of the NSC Jennies.

- 25. The '892 and '515 Patents have earliest effective filing dates in September 2009 and issued in May and March 2012, respectively.
- 26. The NSC Jennies, manufactured in 2009, were marked "U.S. AND OTHER PATENTS PENDING" on both sides of the rail car:

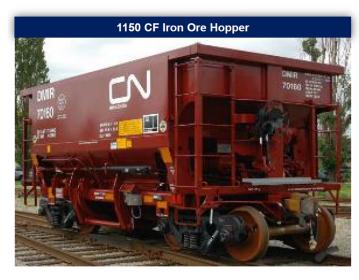


- 27. NSC has not manufactured rail cars incorporating the inventions of the '892 and '515 Patents after those patents issued, and thus was never under an obligation to mark any product pursuant to 35 U.S.C. § 287.
- 28. NSC provided CN with specifications and drawings for the NSC Jennies in or around 2009, when the NSC Jennies were delivered. These specifications and drawings included dimensions for most, if not all, components of the jennies to permit CN to maintain the NSC Jennies.
- 29. NSC did not sell or deliver any NSC Jennies, or any other products that practice the '892 or '515 Patents, after these patents issued.

CANADIAN NATIONAL REQUESTS NEW RAIL CARS

- 30. In or around November 2018, CN told NSC that it would seek to purchase approximately 600-800 new jennies for use by DMIR, with delivery to begin in 2020.
 - 31. NSC provided a quote to CN by September 2019 for approximately 840 jennies.
- 32. In January 2020, NSC gave a presentation to CN regarding NSC as a company, its manufacturing processes, and history of working with CN.
- 33. As part of its presentation, NSC highlighted its commitment to innovation, including its 249 active patent applications and 269 patents granted since 2000.
- 34. As part of its presentation, NSC reminded CN of the innovative and patented features of the jennies it produced for use by DMIR in 2009:

Company Overview Innovative Products



- Patented open top hopper features
- Open end of car design to allow for easy access maintenance
- Versatile door opening system
- ✓ Option for pneumatic or mechanical door operating system



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Confidential Information



- 35. On information and belief, the acquisition process for the jennies was delayed due at least in part to the COVID-19 pandemic.
 - 36. By August 2021, CN had re-ignited its desire to purchase the new jennies.
- 37. From around August 2021 until around January 2023, NSC was in frequent communication with CN about its quote, technical questions, pricing, and timing information regarding the jennies.
 - 38. Ultimately, NSC was not awarded the contract to build the new jennies.

THE ACCUSED PRODUCTS

39. Instead, FreightCar announced in April 2024 that it sold 600 new 1,150 cubic foot iron ore hopper cars to Canadian National for use by DMIR (together with any other iron or

hopper cars of the same or similar design, the "Accused Products"). (See, e.g., CN modernizes DM&IR fleet with acquisition of 600 new iron ore jennies, TRAINS.COM, April 3, 2024 https://www.trains.com/trn/news-reviews/news-wire/cn-modernizes-dmir-fleet-with-acquisition-of-600-new-iron-ore-jennies/ (last accessed April 25, 2024); CN purchases iron-ore cars, enhances U.S. Steel partnership, PROGRESSIVERAILROADING.COM, April 11, 2024 https://www.progressiverailroading.com/RailPrime/Details/CN-purchases-iron-ore-cars-enhances-US-Steel-partnership—71673 (last accessed April 25, 2024); CN is purchasing 600 new iron ore wagons from FreightCar America, RAILMARKET.COM, April 16, 2024 https://railmarket.com/news/freight-rail/18441-cn-is-purchasing-600-new-iron-ore-wagons-from-freightcar-america (last accessed April 25, 2024); CN Receiving Next-Gen Ore Jennies (Updated), RAILWAYAGE.COM, April 9, 2024 https://www.railwayage.com/mechanical/freight-cars/cn-acquiring-next-gen-ore-jennies/ (last accessed April 25, 2024).

- 40. On information and belief, FreightCar was awarded the CN contract for jennies that NSC had sought.
- 41. On information and belief, the Accused Products were manufactured at Defendants' facility in Castaños, Mexico.
- 42. On information and belief, FreightCar is involved in the operation of the facility in Castaños, Mexico.
- 43. On information and belief, FreightCar North America is involved in the operation of the facility in Castaños, Mexico.
- 44. On information and belief, FCA-FASEMEX is involved in the operation of the facility in Castaños, Mexico.

- 45. On information and belief, the FreightCar Entities were part of the bidding process for the CN contract.
- 46. On information and belief the FreightCar Entities were part of the design and/or manufacturing of the Accused Products.
- 47. On information and belief, the FreightCar Entities imported the Accused Products.
- 48. On information and belief, FreightCar continues to make, use, sell, offer to sell, in the U.S. and/or imports the Accused Products into the U.S.
- 49. On information and belief, the Accused Products are intended to be used at the same location in Two Harbors, Minnesota, and for the same purpose as those manufactured by NSC and provided to DMIR in or around 2009.
 - 50. Pictures of exemplary Accused Products are shown below:





- 51. NSC inspected the accused FreightCar jenny bearing the number DMIR 8000 on July 23, 2024 at CN's railyard in Proctor, Minnesota. On information and belief, DMIR is using the accused FreightCar jenny bearing the number DMIR 8000 and other Accused Products.
 - 52. A picture of the DMIR 8000 jenny taken on July 23, 2024 is shown below:



53. A picture of FreightCar's builder's plaque near the center of the DMIR 8000 jenny taken on July 23, 2024 is shown below:



NSC also inspected the NSC Jenny bearing the number DMIR 70016 on July 23,2024 at CN's railyard in Proctor, Minnesota.

55. A picture of the DMIR 70016 Jenny taken on July 23, 2024 is shown below.



56. NSC's builder's plaque appears on the left side of the DMIR 70016 Jenny, as seen in the following photograph taken on July 23, 2024:





Document 56

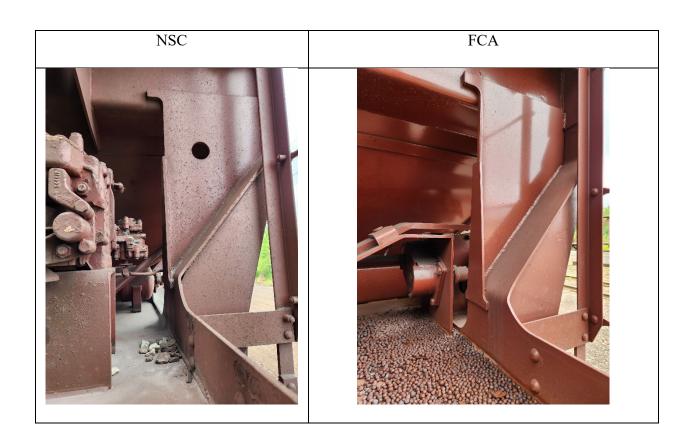
57. NSC's "U.S. AND OTHER PATENTS PENDING" appears in the middle of the DMIR 70016, as seen in the photograph below taken on July 23, 2024:



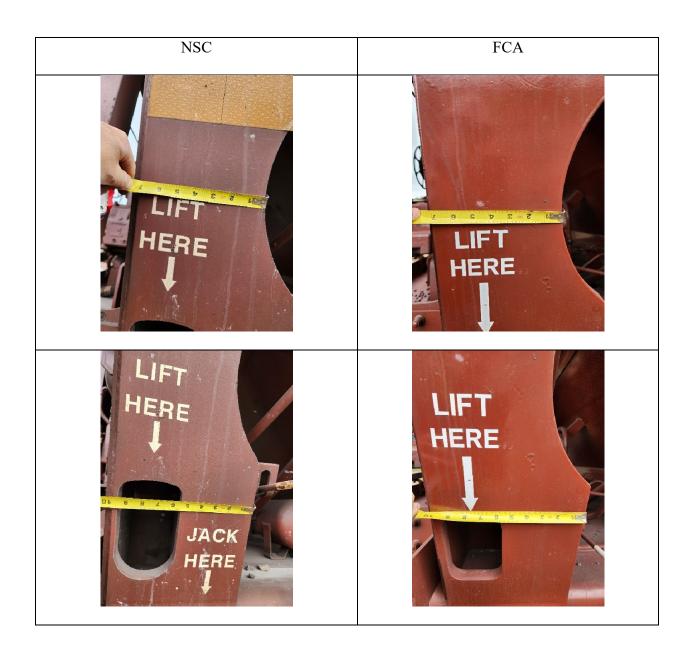
- 58. The Accused Products bear a striking resemblance to the NSC Jennies.
- 59. On July 23, 2024, NSC took measurements of portions of the NSC and FreightCar Jennies.
- 60. NSC's measurements show that portions of the jennies claimed in the '515 and the '892 Patents are dimensionally identical within manufacturing tolerances.
- 61. For example, the NSC Jenny DMIR 70016 and FreightCar jenny DMIR 8000 both have side sills (a claimed feature in the '892 Patent) that are dimensionally identical:

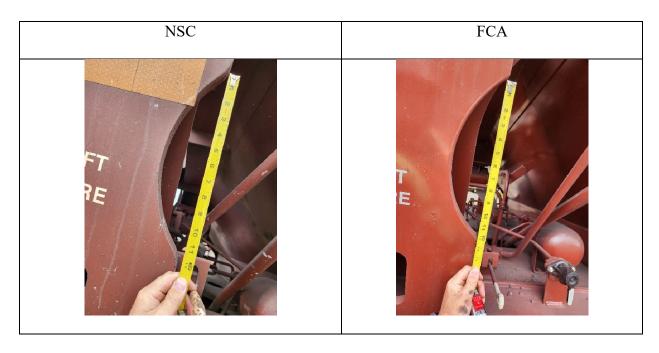


62. The NSC Jenny DMIR 70016 and FreightCar jenny DMIR 8000 both also have corner posts (a claimed feature in the '515 Patent) that have measurements that are identical within manufacturing tolerances:

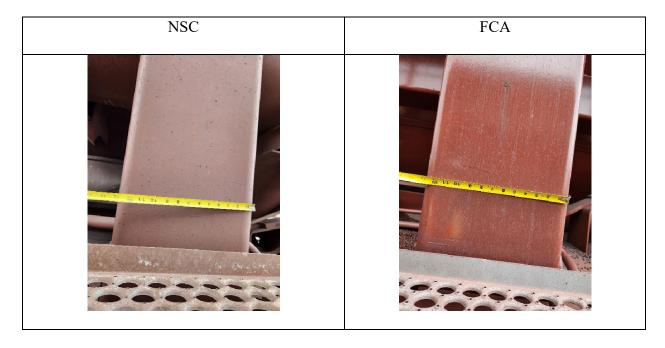


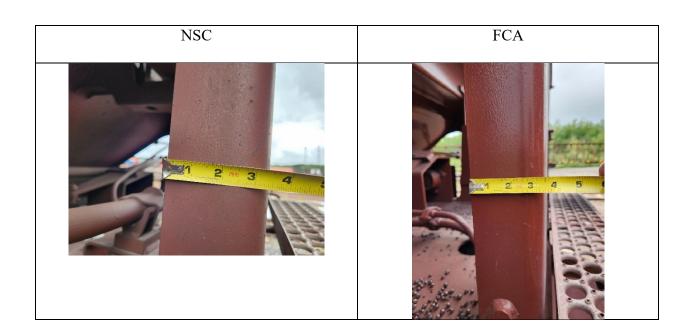






63. The NSC Jenny DMIR 70016 and FreightCar jenny DMIR 8000 both also have end posts (a claimed feature in the '515 Patent) that are dimensionally identical within manufacturing tolerances:





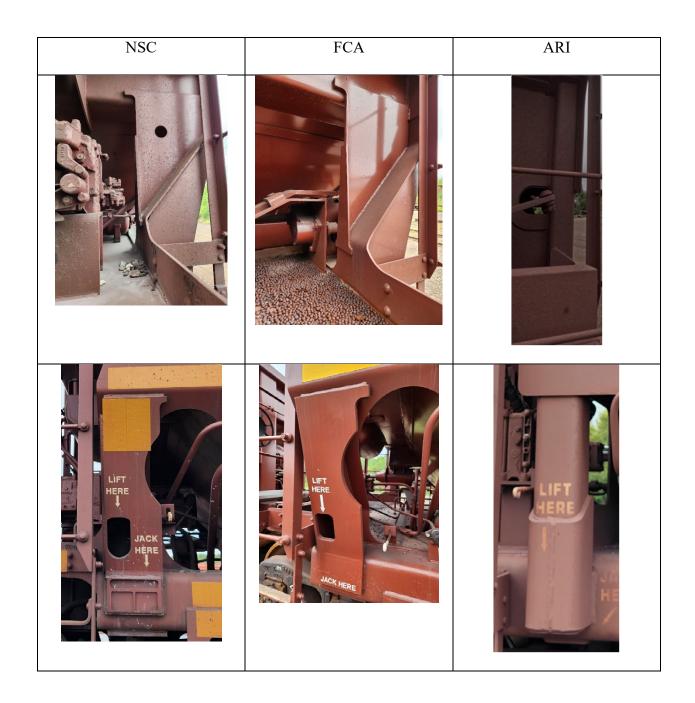
- 64. On information and belief, FreightCar and/or its employees or personnel inspected the NSC Jennies during FreightCar's design or bidding processes and/or were provided with copies of the specifications and drawings for the NSC Jennies by CN.
- 65. On information and belief, FreightCar North America, JAC Operations, and/or FCA-FASEMEX, and/or their employees or personnel inspected the NSC Jennies during FreightCar North America, JAC Operations, and/or FCA-FASEMEX's design or bidding processes and/or were provided with copies of the specifications and drawings for the NSC Jennies by CN.
- 66. On information and belief, FreightCar used the design of the NSC Jennies, and/or the specifications and drawings for the NSC Jennies provided by NSC to CN, to design the Accused Products.
- 67. On information and belief, FreightCar North America, JAC Operations, and/or FCA-FASEMEX used the design of the NSC Jennies, and/or the specifications and drawings for the NSC Jennies provided by NSC to CN, to design the Accused Products.

- 68. On information and belief, FreightCar and/or its employees or personnel saw the "U.S. AND OTHER PATENTS PENDING" marking on the NSC Jennies and would have been notified by CN of NSC's claims of patent rights in the design of the NSC Jennies.
- 69. On information and belief, FreightCar North America, JAC Operations, and/or FCA-FASEMEX and/or their employees or personnel saw the "U.S. AND OTHER PATENTS PENDING" marking on the NSC Jennies and/or would have been notified by CN of NSC's claims of patent rights in the design of the NSC Jennies.
- On information and belief, FreightCar copied the NSC Jennies' design or features 70. thereof.
- 71. On information and belief, FreightCar North America, JAC Operations, and/or FCA-FASEMEX copied the NSC Jennies' design or features thereof.
- 72. The Accused Products did not need to include designs or dimensions that are identical to the NSC Jenny.
- 73. For example, other jennies, such as this one made by ARI, do not use the same dimensions or designs, as shown below:

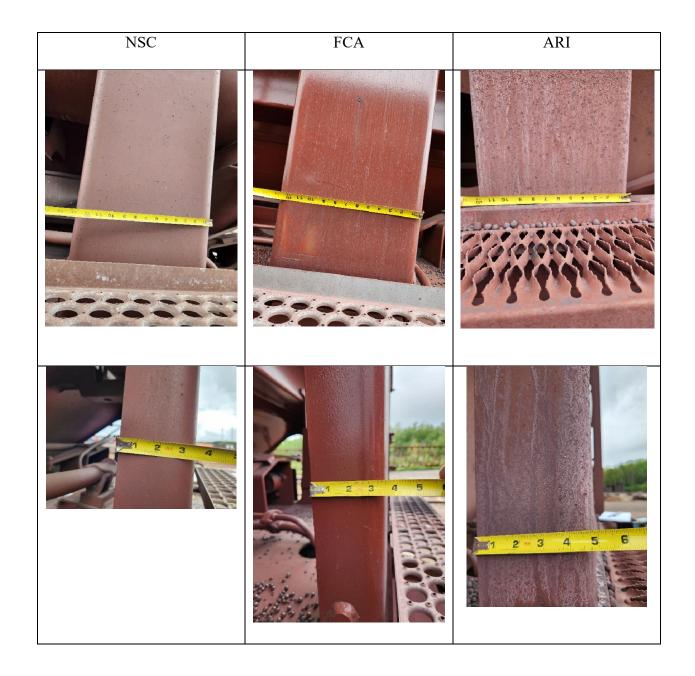




74. For example, ARI's jenny does not have corner post designs that are similar to the Accused Products or the NSC Jennies:



75. As another example, ARI's end post dimensions are different than the Accused Products and NSC's Jennies:



- 76. On information and belief, FreightCar copied the claimed features of the '892 and/or '515 Patents.
- 77. On information and belief, FreightCar used the disclosures of the '892 and '515 Patents to design the Accused Products.
 - 78. FreightCar has long been aware of NSC's patent portfolio.

- 79. In 2011, NSC sued FreightCar for infringement of U.S. Patent Nos. 8,047,140 and 8,065,964 relating to railroad hopper cars. No. 11-cv-08743 (N.D. Ill.).
- 80. In 2015, NSC filed two lawsuits against FreightCar for infringement of five U.S. Patents relating to gondola cars Nos. 7,434,519, 7,461,600, 7,878,125, and 8,025,014 (No. 15-cv-03418) and 7,757,611 (No. 15-cv-08643 (N.D. III.).
 - 81. FreightCar was represented by counsel in connection with each of these cases.
- 82. FreightCar also filed Petitions for *Inter Partes* review challenging the validity of two of the patents in the 2015 cases at the patent office and ultimately lost, the patent office affirming the patents' validity in both cases in final written decisions.
- 83. FreightCar and/or JAC Operations cited the '515 and '892 Patents to the United States Patent and Trademark Office ("USPTO") in Information Disclosure Statements ("IDS") during prosecution for their own patents.
- 84. The USPTO requires that applicants for patents disclose material prior art to the applied-for patent to the USPTO; duplicative disclosures need not be disclosed (i.e., only one patent in a family needs to be disclosed).
- 85. FreightCar and/or JAC Operations cited and incorporated the '515 Patent (and by extension, the '892 Patent) by reference in its own patent applications.
- 86. For example, in U.S. Provisional Application No. 61/977,753, filed April 10, 2014, FreightCar and/or JAC Operations states:

cars to high-sided gondolas. Using a gondola, the railroads are able to haul a larger amount of coal per car. For examples of gondola cars see U.S. Patents 4,212,252; 4,361,097; 4,911,082; 5,253,593; 5,335,603; 5,488,912; 5,813,353; 6,148,735; 6,978,720; 8,132,515; 8,240,256, which patents are incorporated herein by reference.

- 87. U.S. Provisional Application No. 61/977,753 is used as a priority basis for FreightCar Application No. 15/289,466, which issued as U.S. Patent No. 10,017,191, and FreightCar Application No. 16/031,410, which issued as U.S. Patent No. 10,710,612. On information and belief, each of these applications and patents are owned by JAC Operations.
- 88. The same sentence incorporating the '515 Patent by reference appears in U.S. Patent Nos. 10,017,191 and 10,710,612 as "establishing the general nature of the relevant art."
- 89. In an October 10, 2016 IDS, FreightCar and/or JAC Operations cited the '515 Patent (and by extension the '892 Patent, which has the same specification), and also cited six (6) other patents from the first-named inventor of the '515 and '892 Patents, James Forbes, each of which is assigned to NSC:

Application Number

First Named Inventor

Filing Date

INFORMATION DISCLOSURE

STATEMENT BY APPLICANT

15289466

2016-10-10

Dave Single

(Not for submission und	er 37 CFR 1.99)	Examiner Na	me		3017		
				FCA-1301			
		,					
9 5813353		1998-09-29	Sauter, Lyr	ın B.			
10 6148735		2000-11-21	Sauter, e	t al.			
11 5978720		2005-12-27	Johnson; K	ent N.			
12 7434519		2008-10-14	Forbes, e	et al.			
13 7461600		2008-12-09	Forbes, e	et al.			
14 7559284		2009-04-14	Forbes, e	t al.			
15 7757611		2010-07-20	Forbes, e	t al.			
16 7878125		2011-02-01	Forbes, e	et al.			
17 8025014		2011-09-27	Forbes, e	et al.			
18 B132515		2012-03-13	Forbes, e	et al.			
19 8240256		2012-08-14	Nutt; Bryan	М.			

- 90. Each of the patents in the 2015 lawsuits U.S. Patent Nos. 7,434,519, 7,461,600, 7,757,611, 7,878,125, and 8,025,014 are included on the October 10, 2016 IDS. The other patent U.S. No. 7,559,284 is in the same family as patents in the 2015 lawsuits.
- 91. The same seven NSC patents, including the '515 Patent, were cited in a July 10, 2018 IDS in U.S. Pat. App. No. 16/031,410, which issued as U.S. Patent No. 10,710,612.
- 92. On information and belief, the inventor listed on the 10,017,191 and 10,710,612 patents was an employee of FreightCar.
- 93. On information and belief, the inventor listed on the 10,017,191 and 10,710,612 patents was an employee of JAC Operations.
- 94. On information and belief, the patent attorney who filed and prosecuted U.S. Provisional Application No. 61/977,753 and Application Nos. 15/289,466 and 16/031,410 was retained by FreightCar.
- 95. On information and belief, the patent attorney who filed and prosecuted U.S. Provisional Application No. 61/977,753 and Application Nos. 15/289,466 and 16/031,410 was retained by JAC Operations.
- 96. On information and belief, FreightCar, JAC Operations, their employees, and/or the inventor had knowledge of the language used in Provisional Application No. 61/977,753 and Application Nos. 15/289,466 and 16/031,410.
- 97. On information and belief, FreightCar, JAC Operations, their employees and/or the inventor were provided with drafts of the Provisional Application No. 61/977,753 and Application Nos. 15/289,466 and 16/031,410 before they were filed.
- 98. On information and belief, the FreightCar Entities were aware of the '892 and '515 Patents before submitting their bid to CN.

- 99. On information and belief, the FreightCar Entities were aware of the '892 and '515 Patents before delivering rail cars to CN.
- 100. On information and belief, CN informed the FreightCar Entities of NSC's intellectual property in the NSC Jennies.
- 101. On information and belief, CN informed the FreightCar Entities of NSC's '892 or '515 Patents.
- 102. On information and belief, CN informed the FreightCar Entities of the technology that NSC considered proprietary in the design of the NSC Jennies.
- 103. On information and belief, the FreightCar Entities were willfully blind to the possibility that their rail cars infringe at least one of the '892 and '515 Patents.
- 104. On information and belief, the FreightCar Entities took deliberate action to avoid confirming a high probability that their rail cars would infringe the '892 or '515 Patent in view of (1) its awareness of the "U.S. AND OTHER PATENTS PENDING" markings on the NSC Jennies; (2) disclosures regarding the '892 or '515 Patents made by CN to FreightCar, and/or (3) its knowledge of the '515 Patent through prosecution of its own patent applications.
- 105. On information and belief, the FreightCar Entities took deliberate action to avoid confirming a high probability that their rail cars would infringe the '892 or '515 Patent because they copied the design and/or features of the NSC Jennies.
- 106. On information and belief, FreightCar North America, JAC Operations, and/or FCA-FASEMEX were involved in the bidding process for the Accused Products.
- 107. On information and belief, FreightCar North America, JAC Operations, and/or FCA-FASEMEX were involved in the design process for the Accused Products.

- 108. On information and belief, the FreightCar Entities share employees, directors, and/or officers.
- 109. On information and belief, FreightCar North America, JAC Operations, and/or FCA-FASEMEX operate through FreightCar.
- 110. On information and belief, FreightCar North America, JAC Operations, and/or FCA-FASEMEX only act under instructions from FreightCar.
- 111. On information and belief, FreightCar's knowledge can be imputed to FreightCar North America and/or FCA-FASEMEX.

THE ASSERTED PATENTS

- 112. U.S. Patent No. 8,166,892 was filed as Application No. 12/559,065 on September 14, 2009, and issued on May 1, 2012.
- 113. The '892 Patent claims priority to two Canadian Patent Applications, Nos. 2,678,447, filed on September 11, 2009, and 2,678,605, filed September 14, 2009.
- 114. U.S. Patent No. 8,132,515 was filed as Application No. 12/816,660 on June 16,2010, and issued on March 13, 2012.
- 115. The '515 Patent is a divisional of the '892 Patent, and the application number for the '892 Patent is on the face of the '515 Patent.
- 116. The '892 and '515 Patents are each entitled "Railroad gondola car structure and mechanism therefor".
- 117. The '892 and '515 Patents name James W. Forbes, Marcus Thiesen, and Dave Keats as inventors.
- 118. NSC is the owner of all right, title, and interest in and to the '892 and '515 Patents.

- 119. The '892 Patent has 15 claims, of which claims 1 and 2 are independent.
- 120. The '515 Patent has 44 claims, of which claims 1, 7, 18, 20, 24, and 32 are independent.
- 121. The '892 and '515 Patents claim novel features of NSC's design of the rail cars provided for use by DMIR in 2009.
- 122. The '892 and '515 Patents describe a railroad hopper car for carrying particulate material, as shown in Fig. 1 below:

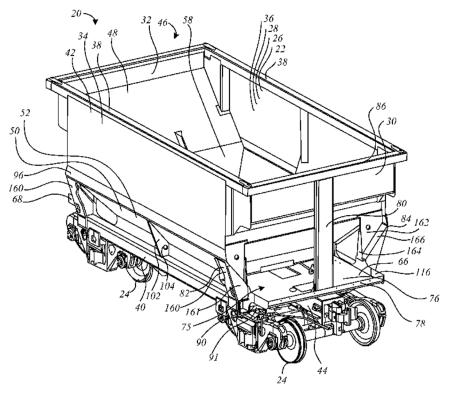


Figure 1

123. "[C]ar 20 may have a car body 22 that is carried on trucks 24 for rolling operation along railroad tracks. . . . Car body 22 may have a lading containment vessel or shell 26 such as may include an upstanding wall structure 28 which may have a pair of opposed first and second end walls 30, 32, that extend cross-wise, and a pair of first and second side walls 34, 36 that

extend lengthwise, the end walls 30, 32 and side walls 34, 36 co-operating to define a generally rectangular form of peripheral wall structure 28. Wall structure 28 may include top chords 38 running along the top of the walls, and side sills 40 running fore-and-aft along lower portions of the side sheets or side sheet assemblies 42 of side walls 34, 36." ('892 Patent¹ at 12:50-13:8.)

- "In a center flow, or flow through car, the upper portion of the car may typically 124. include means by which to admit lading under a gravity drop system. Such an intake 46, or entryway may be a large rectangular opening such as that bounded by top chords 38." (Id. at 13:15-19.) "Car body 22 may include end sheets 48 and side sheets 50. . . . End sheets 48 may be substantially planar slope sheets or slope sheet assemblies that are inclined downwardly in the longitudinally inboard direction to feed the discharge section. . . . [W]hen the gates are opened, the lading may tend to flow out, rather than sit at rest." (*Id.* at 13:20-49.)
- "The primary structure of body 22 of car 20 includes lading containment vessel 125. 26 which is in the nature of hopper 52. Hopper 52 has an upper portion 58 with substantially vertical wall panels, and a lower stationary portion defined by a set of converging sloped walls, namely the side and end slope sheet assemblies 48 and 50. At the lower margin of the sloped walls there is the outflow governor, namely door assembly 56, which, in this instance, may have the form of a pair of first and second, or left and right hand doors 62, 64. This containment structure seats on, and is carried by, a pair of first and second end structures, 66, 68, at either end of the car. End structures 66, 68 are in turn carried by trucks 24. A door operating apparatus or mechanism, or drive train, or transmission, however it may be termed, and identified generally as 70, is provided to move doors 62, 64 between open and closed positions." (*Id.* at 13:50-65.)

¹ Citations are made to the '892 Patent but should also be understood to correspond to citations to the '515 Patent.

surmounted by center plates 72 of longitudinally extending stub sills 44. Stub sills 44 in turn carry laterally extending main bolster arms 74 of main bolster 90. . . . Side sills 40 run lengthwise along the car between, and tie together, the most laterally outboard extremities of main bolster arms 74. A shear plate 76 is mounted in an x-y horizontal plane defining the top cover plate of stub sill 44. Shear plate 76 extends laterally from side sill to side sill, and longitudinally from the fore-and-aft end slope sheet 48 to the laterally extending end sill 78 of the car, which, in this instance may be an upturned flange formed on the longitudinally outboard margin of shear plate 76. In car 20, the primary structure includes an end post 80 and a pair of side or corner posts 82, 84." (*Id.* at 13:66-14:14.)

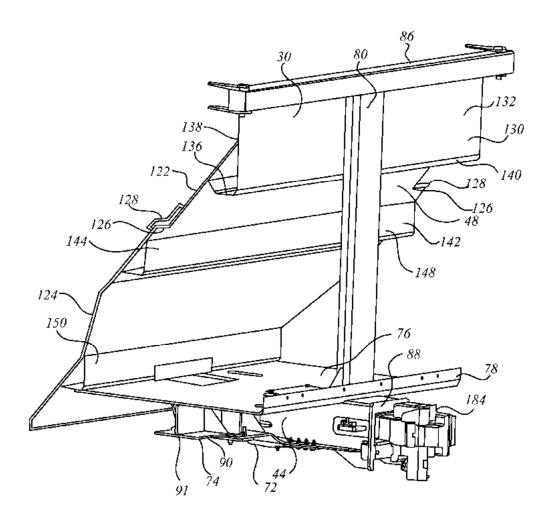


Figure 3a

127. "End post 80 is rooted in shear plate 76 in line with center sill 44, and may have lateral webs or gussets aligned with the webs of stub sill 44 to provide vertical web continuity across shear plate 76. End post 80 then extends fully between shear plate 76 and top chord 86 of end wall 30 or 32, as may be. Corner posts 82 and 84 are rooted to, and stand upwardly from, the junction of the laterally outboard ends of left and right hand main bolster arms 74 and side sills

40. Posts 82 and 84 extend upwardly from this junction to mate with various elements of the end and side walls, as may be described below." (*Id.* at 14:15-26.)

- 128. "As described in additional detail below, car 20 has an abnormally short distance from the striker 88 to the truck center, i.e., the CL of centerplate 72. Striker 88 is the vertical planar surrounding face plate at the outboard end of the stub sill 44. In the terminology of the industry, the portion of the center sill 44 (be it a stub center sill or a straight through center sill) that lies longitudinally outboard of the truck center CL-Truck may also be referred to as the draft sill. In car 20, the short draft sill length, identified as L88, leaves an anomalously small space in which to install other systems, such as the brake reservoir and the door operating pneumatic cylinder. Car 20 has an end of car machinery space, indicated generally as 75, that is bounded by shear plate 76 on the bottom, the sloped end wall assembly 30 or 32 of the car on the top, main vertical central end post 80, and main side posts 82, 84 at the ends of main bolster 90. This space may be referred to as having the shape, generally, of a triangular prism and is substantially unobstructed by the primary structure of the car. For the purposes of this description, primary structure is defined as the underframe, including side sills and center sill (i.e., including the draft sill), the side walls, the slope sheets and top chords, the hopper construction including the stationary parts of the discharge section, as well as any cross-bearers, cross-ties, bolsters, shear plates and so on. Primary structure excludes secondary or ancillary structure or systems such as ladders, cat-walks and other safety appliances, brakes, brake rods and brake fittings, air hoses, reservoirs and pneumatic fittings, movable door members, door operating linkages, and so on." (*Id.* at 14:27-55.)
- 129. In addition, Figure 2C shows "an end view of the sidewall of FIG. 2a." (*Id.* at 10:50.) "FIGS. 1 and 2 a, 2 b and 2 c, all show the sidewall of the car, indicated generally as 34

or 36. . . . Sidewall 34 or 36 can be seen to have a bottom flange or chord member, namely side sill 40, a top flange or chord member, namely top chord 38, which may have the form of a square or rectangular hollow structural steel tube; and an intermediate shear force transfer web, namely side sheet assembly 42. Side sheet assembly 42 may include an upper sheet portion or member 92 that is welded to the outside face of top chord 38 at a lap joint, and that extends downwardly therefrom; and a lower sheet portion or member 94. Member 94 may have the form of a Z-section, having a first portion, namely an upper flange or leg or margin 96 that extends in a substantially vertical plane and has an uppermost margin that overlaps the lowermost edge or margin of member 92; a second or intermediate portion 98 that runs in an inclined plane sloping inwardly and downwardly on the slope of the hopper side sheets generally, and a third or bottom portion, namely bottom flange, or leg, or margin 100 that extends in a substantially vertical plane downwardly." (*Id.* at 15:1-21.)

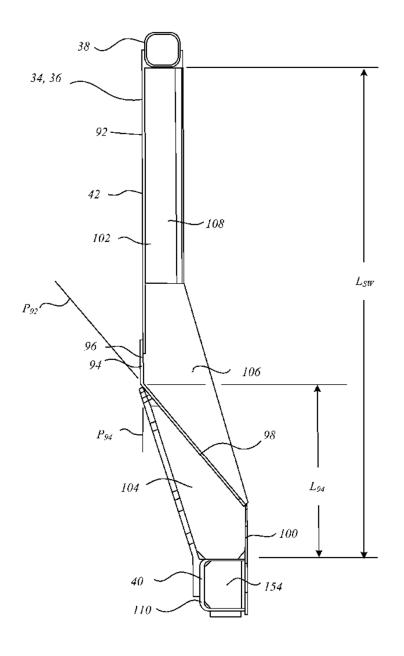


Figure 2c

130. "Sidewall 34 or 36 also includes a central post, or web stiffener, 102 that has a lowermost first portion 104 an intermediate second portion 106, and an uppermost third portion 108. Side sill 40 includes a channel 110 that is welded toes-inward against the lowermost marginal portion of lower leg 100 to form a closed section. . . . As may be noted, portion 104 stands outboard of the sidewall sheet." (*Id.* at 15:21-33.)

"Portion 108 is a rectangular web stiffener that is welded to, and extends 131. downwardly from, the underside of top chord 38 along the inside face of vertical web portion 92. Intermediate portion 106 is a web, or plate, or gusset, that is also a quadrilateral, having a first edge that overlaps, and is welded to, the lower margin of portion 108. A second edge is welded to the lower region of vertical web portion 92, and to the upper flange or leg 96. A third edge is welded along the sloped portion 98 of member 94. The fourth edge is free, and faces inwardly into the lading containment space of the hopper. Portions 104 and 106 are co-planar, or substantially co-planar, such that stiffener 102 has web continuity through member 94. The upper margin of the side slope sheet 50 of the hopper discharge section is welded to the lower margin of the inclined or sloped portion 98, such that the structure presents a continuous sloped surface for containing, and then slidingly discharging, particulate lading. Expressed differently, the web of the sidewall traverses the sidewall stiffener, commencing on its inboard margin at side sill 40, traverses the web mid-way up the post, and ends along its outboard margin at top chord 38. In this arrangement, the vertical stiffener, 102, acts as the web of a T-section, and the local region of the wall section to which it is joined functions as the flange of that T-section." (*Id.* at 15:34-57.)

COUNT I: INFRINGEMENT OF U.S. PATENT NO. 8,132,515

- 132. Plaintiff incorporates herein by reference the allegations in paragraphs 1-98.
- 133. On information and belief, Defendants have been and are now directly infringing the '515 Patent in violation of 35 U.S.C. § 271(a) at least by making, using, selling, offering for sale, and/or importing into the United States the Accused Products. The Accused Products practice one or more claims of the '515 Patent, including at least representative claim 1.
 - 134. Claim 1 of the '515 Patent recites:

1. A railroad hopper car for carrying particulate material, said hopper car comprising:

a hopper;

first and second end sections for carriage by respective first and second rail road car trucks for rolling motion along railroad tracks in a longitudinal direction;

said hopper being suspended between said first and second end sections, said hopper having a discharge section through which to release lading, and first and second end slope sheets oriented toward said first and second end sections, said end slope sheets being inclined in the longitudinal direction to feed said discharge section;

said first end section including a draft sill extending in the longitudinal direction, a main bolster extending cross-wise to said draft sill, and a shear plate mounted to said draft sill and to said main bolster, said shear plate extending lengthwise along said draft sill and cross-wise from side to side of said hopper car;

said first end slope sheet of said hopper over hanging said shear plate of said first end section; and

said hopper car being free of primary structure directly above said shear plate of said first end section under said overhang of said first end slope sheet of said hopper;

one of:

- (a) said first end slope sheet has an upper margin and said hopper car includes an end post extending upwardly from said draft sill to said upper margin of said first end slope sheet; and
- (b) said first end slope sheet has an upper margin terminating at an end wall, and said hopper car includes an end post extending upwardly from draft stub sill to said end wall;

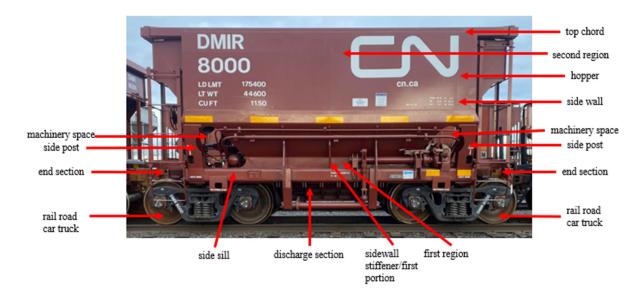
said shear plate has a longitudinally outboard margin and said draft sill has a striker located outboard of said longitudinally outboard margin of said shear plate, and said end post is one of:

- (a) rooted to said draft sill adjacent to said striker;
- (b) rooted to said shear plate adjacent to said longitudinally outboard margin of said shear plate;

said bolster has first and second laterally outboard distal ends, and said hopper car has corner posts extending upwardly from said distal ends of said bolster to said first end slope sheet; and

said hopper car has a machinery space bounded by (a) said first end slope sheet; (b) said shear plate of said first end section; (c) said end post; and (d) said corner posts, and said machinery space is free of any other primary structure.

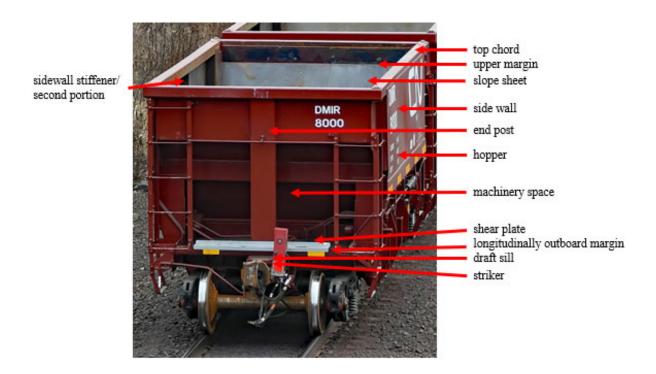
135. The Accused Products are "[a] railroad hopper car for carrying particulate material," as shown in the below image, hereinafter "Annotated Image 1":



Annotated Image 1

- 136. As shown in Annotated Image 1, the Accused Products include "a hopper."
- 137. The Accused Products include "first and second end sections for carriage by respective first and second rail road car trucks for rolling motion along railroad tracks in a longitudinal direction," as shown in Annotated Image 1.
- 138. The Accused Products include "said hopper being suspended between said first and second end sections, said hopper having a discharge section through which to release lading, and first and second end slope sheets oriented toward said first and second end sections, said end

slope sheets being inclined in the longitudinal direction to feed said discharge section," at least as shown in Annotated Image 1 and the below image, hereinafter "Annotated Image 2":



Annotated Image 2

139. The Accused products include: "said first end section including a draft sill extending in the longitudinal direction, a main bolster extending cross-wise to said draft sill, and a shear plate mounted to said draft sill and to said main bolster, said shear plate extending lengthwise along said draft sill and cross-wise from side to side of said hopper car," at least as shown in Annotated Image 2 and the below images, hereinafter the "Annotated Image 3" and the "Annotated Image 4":



Annotated Image 3



Annotated Image 4

- 140. The Accused Products include: "said first end slope sheet of said hopper over hanging said shear plate of said first end section," at least as shown in Annotated Images 1-2.
- 141. The Accused Products include: "said hopper car being free of primary structure directly above said shear plate of said first end section under said overhang of said first end slope sheet of said hopper," at least as shown in Annotated Images 1-4.
- 142. The Accused Products include: "one of: (a) said first end slope sheet has an upper margin and said hopper car includes an end post extending upwardly from said draft sill to said upper margin of said first end slope sheet; and (b) said first end slope sheet has an upper margin terminating at an end wall, and said hopper car includes an end post extending upwardly from draft stub sill to said end wall," at least as shown in Annotated Image 2.
- 143. The Accused Products include: "said shear plate has a longitudinally outboard margin and said draft sill has a striker located outboard of said longitudinally outboard margin of said shear plate, and said end post is one of: (a) rooted to said draft sill adjacent to said striker; (b) rooted to said shear plate adjacent to said longitudinally outboard margin of said shear plate," at least as shown in Annotated Images 2 and 4.
- 144. The Accused Products include: "said bolster has first and second laterally outboard distal ends, and said hopper car has corner posts extending upwardly from said distal ends of said bolster to said first end slope sheet," at least as shown in Annotated Images 1, 3, and 4.
- 145. The Accused Products include: "said hopper car has a machinery space bounded by (a) said first end slope sheet; (b) said shear plate of said first end section; (c) said end post; and (d) said corner posts, and said machinery space is free of any other primary structure," at least as shown in Annotated Images 1, 3, and 4.

- 146. Defendants have committed infringing acts without authorization, consent, permission or a license from Plaintiff.
- 147. On information and belief, Defendants have also induced and continue to induce infringement of at least representative claim 1 of the '515 Patent pursuant to 35 U.S.C. § 271(b), by actively and knowingly inducing, directing, causing, and encouraging others, including, but not limited to, their customers and/or end users, to make, use, sell, and/or offer to sell in the United States the Accused Product.
- On information and belief, Defendants' customers and/or end users have directly 148. infringed and are directly infringing at least representative claim 1 of the '515 Patent. Defendants have actively encouraged, educated, and instructed its customers and/or end users to use the Accused Products within the United States, and therefore Defendants have knowingly induced its customers and/or end users to directly infringe the '515 Patent. Defendants have acted and continue to act with the specific intent to encourage such infringement by customers and/or end users, and knowing that the induced acts by these customers and/or end users constitute infringement of the '515 Patent.
- Defendants' direct and indirect infringement is literal, under the doctrine of 149. equivalents, or both.
- 150. Defendants will continue to infringe the '515 Patent, causing irreparable harm to Plaintiff for which there is no adequate remedy at law unless and until enjoined by this Court. Defendants' infringement has caused and continues to cause irreparable harm to Plaintiff in the form of loss of business opportunities, lost sales, loss of market share, loss of goodwill, price suppression, and the loss of Plaintiff's exclusive right to practice the inventions.

- 151. Defendants' infringement is willful and on information and belief, Defendants had knowledge of the '515 Patent, acted to infringe the '515 Patent, or were willfully blind to a high likelihood that it infringed the '515 Patent.
- 152. As a result of Defendants' infringement of the '515 Patent, Plaintiff has suffered damages and is owed no less than a reasonable royalty under 35 U.S.C. § 284 as a remedy.

COUNT II: INFRINGEMENT OF U.S. PATENT NO. 8,166,892

- 153. Plaintiff incorporates herein by reference the allegations in paragraphs 1-119.
- 154. On information and belief, Defendants have been and are now directly infringing the '892 Patent in violation of 35 U.S.C. § 271(a) at least by making, using, selling, offering or sale, and/or importing into the United States the Accused Products. The Accused Products practice one or more claims of the '892 Patent, including at least representative claim 1.
 - 155. Claim 1 of the '892 Patent states:
 - 1. A rail road hopper car comprising:
 - a hopper carried between a pair of trucks, said hopper having first and second upstanding sidewalls running lengthwise therealong;
 - said hopper having a lower discharge and convergent slope sheets giving onto said discharge;
 - said rail road car having a side sill and a top chord;
 - said first upstanding sidewall extending from said side sill to said top chord;
 - said first upstanding sidewall having a predominantly upwardly running sidewall stiffener mounted thereto, said sidewall stiffener being located at a longitudinal station intermediate the trucks;
 - said first upstanding sidewall having a first region, said first region being a lower region thereof;
 - said first upstanding sidewall having a second region, said second region being an upper region thereof;

said sidewall stiffener having a first portion, said first portion being a lower portion thereof, said first portion being mounted to said first region of said first upstanding sidewall;

said sidewall stiffener having a second portion, said second portion being an upper portion thereof, said second portion being mounted to said second region of said first upstanding sidewall;

said first portion of said first upstanding sidewall stiffener being laterally outboard of said first region of said first upstanding sidewall;

said second portion of said sidewall stiffener being laterally inboard of said second region of said first upstanding sidewall;

said first sidewall having a continuous section between said first and second regions thereof; and

said sidewall stiffener having web continuity between said first and second portions thereof.

- 156. The Accused Products include "a hopper carried between a pair of trucks, said hopper having first and second upstanding sidewalls running lengthwise therealong," at least as shown in Annotated Image 1.
- 157. The Accused Products include "said hopper having a lower discharge and convergent slope sheets giving onto said discharge," at least as shown in Annotated Images 1 and 2.
- 158. The Accused Products include "said rail road car having a side sill and a top chord," at least as shown in Annotated Images 1 and 2.
- 159. The Accused Products include "said first upstanding sidewall extending from said side sill to said top chord," at least as shown in Annotated Images 1 and 2.
- 160. The Accused Products include "said first upstanding sidewall having a predominantly upwardly running sidewall stiffener mounted thereto, said sidewall stiffener being

located at a longitudinal station intermediate the trucks," at least as shown in Annotated Images 1 and 2.

- 161. The Accused Products include "said first upstanding sidewall having a first region, said first region being a lower region thereof," and "said first upstanding sidewall having a second region, said second region being an upper region thereof," at least as shown in Annotated Images 1 and 2.
- 162. The Accused Products include "said sidewall stiffener having a first portion, said first portion being a lower portion thereof, said first portion being mounted to said first region of said first upstanding sidewall," at least as shown in Annotated Image 1.
- 163. The Accused Products include "said sidewall stiffener having a second portion, said second portion being an upper portion thereof, said second portion being mounted to said second region of said first upstanding sidewall," at least as shown in Annotated Image 2.
- 164. The Accused Products include "said first portion of said first upstanding sidewall stiffener being laterally outboard of said first region of said first upstanding sidewall," at least as shown in Annotated Image 1.
- 165. The Accused Products include "said second portion of said sidewall stiffener being laterally inboard of said second region of said first upstanding sidewall," at least as shown in Annotated Image 2.
- 166. On information and belief, the Accused Products include "said first sidewall having a continuous section between said first and second regions thereof," at least as shown in Annotated Images 1 and 2.

- 167. On information and belief, the Accused Products include "said sidewall stiffener having web continuity between said first and second portions thereof," at least as shown in Annotated Images 1 and 2.
- 168. Defendants have committed infringing acts without authorization, consent, permission or a license from Plaintiff.
- 169. On information and belief, Defendants have also induced and continue to induce infringement of at least representative claim 1 of the '892 Patent pursuant to 35 U.S.C. § 271(b), by actively and knowingly inducing, directing, causing, and encouraging others, including, but not limited to, their customers and/or end users, to make, use, sell, and/or offer to sell in the United States the Accused Products.
- 170. On information and belief, Defendants' customers and/or end users have directly infringed and are directly infringing at least representative claim 1 of the '892 Patent. Defendants have actively encouraged, educated, and instructed its customers and/or end users to use the Accused Products within the United States, and therefore Defendants have knowingly induced its customers and/or end users to directly infringe the '892 Patent. Defendants have acted and continue to act with the specific intent to encourage such infringement by customers and/or end users, and knowing that the induced acts by these customers and/or end users constitute infringement of the '892 Patent.
- 171. Defendants' direct and indirect infringement is literal, under the doctrine of equivalents, or both.
- 172. Defendants will continue to infringe the '892 Patent, causing irreparable harm to Plaintiff for which there is no adequate remedy at law unless and until enjoined by this Court.

 Defendants' infringement has caused and continues to cause irreparable harm to Plaintiff in the

form of loss of business opportunities, lost sales, loss of market share, loss of goodwill, price suppression, and the loss of Plaintiff's exclusive right to practice the inventions.

- 173. Defendants' infringement is willful, and on information and belief, Defendants had knowledge of the '892 Patent, acted to infringe the '892 Patent, or were willfully blind to a high likelihood that it infringed the '892 Patent.
- 174. As a result of Defendants' infringement of the '892 Patent, Plaintiff has suffered damages and is owed no less than a reasonable royalty under 35 U.S.C. § 284 as a remedy.

JURY TRIAL DEMAND

Pursuant to Fed. R. Civ. P. 38(b), Plaintiff hereby demands a trial by jury of all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that this Court enter judgment in its favor and grant the following relief:

- A. A judgment that Defendants have directly and/or indirectly infringed one or more claims of the '515 and/or '892 Patents;
- B. A permanent injunction against Defendants and their respective officers, directors, agents, branches, subsidiaries, parents, partners, and any others active in concert with Defendants from further infringement of the '515 and/or '892 Patents;
- C. A judgment or order requiring Defendants to pay Plaintiff past and future damages under 35 U.S.C. § 284, including any supplemental damages arising from any continuing post-verdict infringement between the time of the trial and entry of the final judgment with an accounting as needed;
- D. A judgment or order requiring Defendants to pay Plaintiff no less than a reasonable royalty after the final judgment if a permanent injunction is not granted;

- E. A judgment and order requiring Defendants to pay Plaintiff pre-judgment and post-judgment interest on any damages award;
- F. A judgment and order that Defendants' infringement of the '515 and/or '892 Patents be found willful and that the Court award treble damages pursuant to 35 U.S.C. § 284;
- G. A judgement that Defendants are jointly, severally, or alternatively liable for their infringement;
- H. A judgment that this case is exceptional under 35 U.S.C. § 285 and an order that Defendants pay Plaintiff their attorneys' fees incurred in prosecuting this action;
- I. A judgment and order requiring Defendants to pay Plaintiff's costs and expenses incurred in this action; and
- J. Any further relief, including equitable relief, as the Court may deem just and proper.

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Dated: March 27, 2025

/s/ Andrew E. Russell

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